

Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for installing a positioning system, the positioning system comprising two or more base stations the method comprising the steps of:
 - (a) prior to positioning the two or more base stations to their operational positions within a selected environment, symmetrically docking together collecting said two or more the base stations at a single symmetrically docketed position,
 - (b) quantifying and recording clock offset information between each of said two or more docked base stations with respect to a center reference base station at said single docked position any lack of synchronisation between the clocks of the base stations,
 - (c) relocating one or more of the base stations from said single docketed position to their fixed, operational positions,
 - (d) measuring the time of flight of a signal from each of the relocated base stations to at least one other base station,
 - (e) determining, at said center reference base station from the recorded clock offset information time of flight and the quantified and recorded clock offset lack of synchronization data the a relative separation of the base stations and hence the configuration of the installed positioning system, and
 - (f) recording at said center reference base station the configuration of the installed positioning system, and
 - (g) storing the configuration data at each base station.

PATENT APPLICATION

ATTY DOCKET GB 04 0027 [MS-294]

Serial No. 10/587,721

Amendment in Reply to a Non-Final Office Action of October 28, 2008

Confirmation No. 1415

2. (Previously Presented) A method as claimed in claim 1 wherein after the quantifying step, and before the relocating step, the clocks of the base stations are synchronised.
3. (Currently Amended) A positioning system comprising: a plurality of base stations,
means for symmetrically docking together said plurality of base stations at a single symmetrically docketed position,
means for quantifying and recording by a center reference base station at said single docked position clock offset information between the respective clocks of the plurality of base stations with respect to the center reference base station,
means for relocating one or more of the base stations from said single docketed position to their fixed, operational positions,
means for measuring the time of flight of a signal from each of the relocated base stations to at least one other base station,
means for determining, at said center reference base station, from the measured time of flight information and the clock offset information, a relative separation of the base stations and hence the configuration of the installed positioning system,
means for recording at said center reference base station the configuration of the installed positioning system, and
means for storing the configuration data at each base station
~~means for quantifying any lack of synchronisation between the clocks of the base stations when collocated, means for determining the relative separation of the base stations when relocated to their fixed, operational positions, and means for recording a configuration of the system defined by the relative separations of the base stations.~~

PATENT APPLICATION
ATTY DOCKET GB 04 0027 [MS-294]
Serial No. 10/587,721
Amendment in Reply to a Non-Final Office Action of October 28, 2008
Confirmation No. 1415

4. (Currently Amended) A positioning system as claimed in claim 3 including a base station operable as a location measurement unit for E-OTD type-positioning.
5. (Previously Presented) A positioning system as claimed in claim 3 comprising 3 or more base stations.
6. (Previously Presented) A positioning system as claimed in claim 3 comprising 5 or more base stations.
7. (Previously Presented) A positioning system as claimed in claim 3 comprising 7 or more base stations.
8. (Previously Presented) A positioning system as claimed in claim 3 wherein the base stations are removably dockable to each other.
9. (Previously Presented) A positioning system as claimed in claim 8 wherein the remaining base stations are symmetrically, removably dockable about the reference base station.
10. (Previously Presented) A positioning system as claimed in claim 3 wherein the means for quantifying and means for recording are embodied in the reference base station.

PATENT APPLICATION
ATTY DOCKET GB 04 0027 [MS-294]
Serial No. 10/587,721
Amendment in Reply to a Non-Final Office Action of October 28, 2008
Confirmation No. 1415

11. (Currently Amended) A center base station configured to perform the method of:

- a) prior to positioning a plurality of base stations to their operational positions within a selected environment;
- b) quantifying and recording, at the center base station, clock offsets between a plurality of docked base stations relative to the center base station at a single docked position;
- c) one of
 - (i) relocating one or more of the plurality of base stations, from the single docked position to their operational positions and measuring at the center base station, the time of flight signal from each of the relocated base stations to at least one other base station;
 - or
 - (ii) measuring at the center base station, the time of flight signal from each of the relocated base stations to at least one other base station and relocating one or more of the plurality of base stations, from the single docked position to their operational positions
- d) determining, at the center base station, from the quantified and recorded clock offsets and the measured time of flight signals,
 - a relative separation of the base stations and hence a configuration of an installed positioning system; and

PATENT APPLICATION

ATTY DOCKET GB 04 0027 [MS-294]

Serial No. 10/587,721

Amendment in Reply to a Non-Final Office Action of October 28, 2008

Confirmation No. 1415

e) recording at the center base station, the configuration of the installed positioning system

- (i) — ~~determining any lack of synchronicity in the clocks of a plurality of base stations when collocated with those base station in a first position, and either~~
- (ii) — ~~after relocating one or more of the base stations, determining the relative position of the base stations from range measurements taken between the base stations after relocation and the lack of synchronicity determined in step (i) or:~~
- (iii) — ~~after synchronisation the base stations and subsequently relocating of one or more of the base stations, determining the relative position of the base stations from range measurements taken between the base stations after relocation.~~